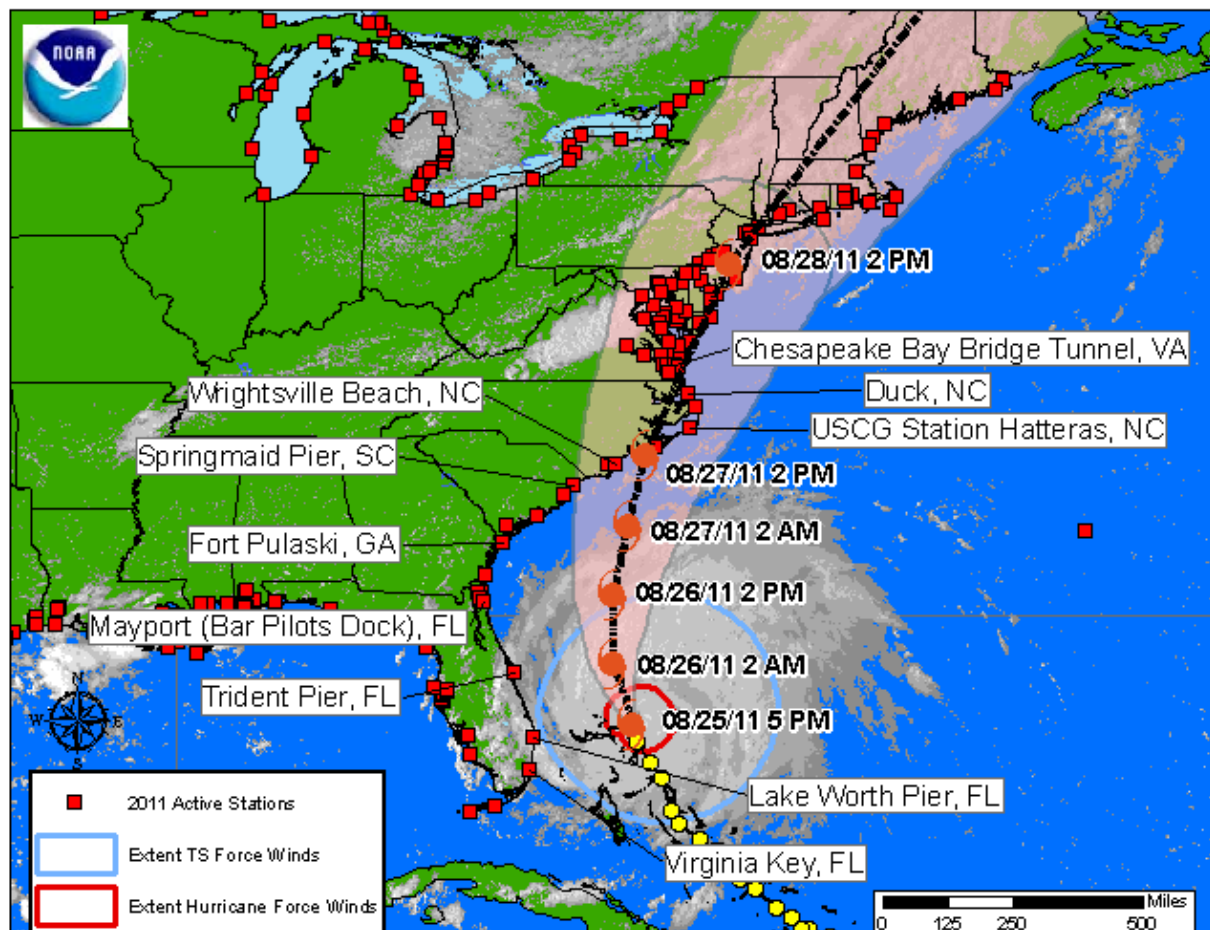




Hurricane IRENE QuickLook
Posted: 18:00 EDT 08/25/2011

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/25/2011 18:00 EDT, water levels along the eastern shore are beginning to rise above predictions in some locations with residual levels of between 0.5 and 1.25 feet in parts of Florida, Georgia, and South Carolina. Winds are between 5 and 20 knots with higher gusts at Trident Pier, Lake Worth and Mayport. Barometric pressure is falling in most locations.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Virginia Key, FL Next predicted high tides are 2.23 ft (0.68 m) at 08/25/2011 18:56 EDT and 2.24 ft (0.68 m) at 08/26/2011 07:09 EDT.

Lake Worth, FL Next predicted high tides are 2.91 ft (0.89 m) at 08/26/2011 05:58 EDT and 3.12 ft (0.95 m) at 08/26/2011 18:39 EDT.

Hurricane IRENE QuickLook, POSTED 18:00 EDT 08/25/2011

Trident Pier, FL Next predicted high tides are 3.37 ft (1.03 m) at 08/26/2011 05:41 EDT and 4.29 ft (1.31 m) at 08/26/2011 18:19 EDT.

Mayport, FL Next predicted high tides are 5.20 ft (1.58 m) at 08/25/2011 18:17 EDT and 4.57 ft (1.39 m) at 08/26/2011 06:38 EDT.

Fort Pulaski, GA Next predicted high tides are 6.74 ft (2.05 m) at 08/26/2011 06:06 EDT and 8.04 ft (2.45 m) at 08/26/2011 18:35 EDT.

Springmaid Pier, SC Next predicted high tides are 4.91 ft (1.50 m) at 08/26/2011 05:27 EDT and 6.02 ft (1.83 m) at 08/26/2011 17:50 EDT.

Wrightsville Beach, NC Next predicted high tides are 3.75 ft (1.14 m) at 08/26/2011 05:30 EDT and 4.74 ft (1.44 m) at 08/26/2011 17:57 EDT.

USCG Station Hatteras, NC Next predicted high tides are 0.48 ft (0.15 m) at 08/25/2011 18:41 EDT and 0.58 ft (0.18 m) at 08/26/2011 07:03 EDT.

Duck, NC Next predicted high tides are 3.16 ft (0.96 m) at 08/26/2011 05:30 EDT and 3.99 ft (1.22 m) at 08/26/2011 17:54 EDT.

Chesapeake Bay Bridge Tunnel, VA Next predicted high tides are 2.57 ft (0.78 m) at 08/26/2011 06:19 EDT and 3.12 ft (0.95 m) at 08/26/2011 18:47 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:DW

SELECT NATIONAL HURRICANE CENTER (NHC) ADVISORY INFORMATION:

HURRICANE IRENE ADVISORY NUMBER 22

500 PM EDT THU AUG 25 2011

...IRENE STILL BATTERING ABACO ISLAND...NEW WATCHES AND WARNINGS
ISSUED FOR THE EAST COAST OF THE UNITED STATES...

IRENE IS LOCATED ABOUT 575 MI S OF CAPE HATTERAS NORTH CAROLINA WITH MAXIMUM
SUSTAINED WINDS...115 MPH... PRESENT MOVEMENT...NNW OR 335 DEGREES AT 14 MPH
MINIMUM CENTRAL PRESSURE...950 MB...28.05 INCHES

WATCHES AND WARNINGS

CHANGES IN WATCHES AND WARNINGS WITH THIS ADVISORY...

THE GOVERNMENT OF THE BAHAMAS HAS DISCONTINUED THE HURRICANE WARNING FOR THE CENTRAL BAHAMAS.

A TROPICAL STORM WARNING HAS BEEN ISSUED FOR THE COAST OF SOUTH CAROLINA FROM EDISTO BEACH NORTHWARD TO LITTLE RIVER INLET.

A HURRICANE WARNING HAS BEEN ISSUED FOR THE COAST OF NORTH CAROLINA FROM LITTLE RIVER INLET NORTHWARD TO THE VIRGINIA BORDER... INCLUDING THE PAMLICO...ALBEMARLE...AND CURRITUCK SOUNDS

A HURRICANE WATCH HAS BEEN ISSUED FOR THE EAST COAST OF THE UNITED STATES FROM THE VIRGINIA/NORTH CAROLINA BORDER NORTHWARD TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY...AND THE CHESAPEAKE BAY SOUTH OF SMITH POINT.

A TROPICAL STORM WATCH HAS BEEN ISSUED FOR THE CHESAPEAKE BAY FROM SMITH POINT NORTHWARD AND THE TIDAL POTOMAC.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- * THE NORTHWESTERN BAHAMAS

- * THE COAST OF NORTH CAROLINA FROM LITTLE RIVER INLET NORTHWARD TO THE VIRGINIA BORDER...INCLUDING THE PAMLICO...ALBEMARLE...AND CURRITUCK SOUNDS

A HURRICANE WATCH IS IN EFFECT FOR...

- * THE VIRGINIA/NORTH CAROLINA BORDER NORTHWARD TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY...AND CHESAPEAKE BAY SOUTH OF SMITH POINT.

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * NORTH OF EDISTO BEACH SOUTH CAROLINA TO LITTLE RIVER INLET

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * CHESAPEAKE BAY FROM SMITH POINT NORTHWARD AND THE TIDAL POTOMAC.

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA. A WARNING IS TYPICALLY ISSUED 36 HOURS BEFORE THE ANTICIPATED FIRST OCCURRENCE OF TROPICAL-STORM-FORCE WINDS...CONDITIONS THAT MAKE OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA WITHIN 36 HOURS.

A HURRICANE WATCH MEANS THAT HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA. A WATCH IS TYPICALLY ISSUED 48 HOURS BEFORE THE ANTICIPATED FIRST OCCURRENCE OF TROPICAL-STORM-FORCE WINDS...CONDITIONS THAT MAKE OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE

WITHIN THE WATCH AREA...GENERALLY WITHIN 48 HOURS.

INTERESTS ELSEWHERE IN THE MID-ATLANTIC STATES AND NEW ENGLAND SHOULD MONITOR THE PROGRESS OF IRENE.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 PM EDT...2100 UTC...THE CENTER OF HURRICANE IRENE WAS LOCATED NEAR LATITUDE 27.0 NORTH...LONGITUDE 77.3 WEST. IRENE IS MOVING TOWARD THE NORTH-NORTHWEST NEAR 14 MPH...22 KM/H. THIS MOTION IS EXPECTED TO CONTINUE THROUGH TONIGHT WITH A TURN TOWARD THE NORTH BY EARLY FRIDAY. ON THE FORECAST TRACK...THE CORE OF THE HURRICANE WILL MOVE NORTH OF THE NORTHWESTERN BAHAMAS TONIGHT...AND PASS WELL OFFSHORE OF THE EAST COAST OF CENTRAL AND NORTH FLORIDA TONIGHT AND EARLY FRIDAY. THE HURRICANE IS FORECAST TO APPROACH THE COAST OF NORTH CAROLINA ON SATURDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 115 MPH...185 KM/H...WITH HIGHER GUSTS. IRENE IS A CATEGORY THREE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SOME STRENGTHENING IS POSSIBLE TONIGHT AND FRIDAY.

IRENE IS A LARGE TROPICAL CYCLONE. HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 80 MILES...130 KM...FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 290 MILES...465 KM.

THE LATEST MINIMUM CENTRAL PRESSURE REPORTED BY RECONNAISSANCE AIRCRAFT IS 950 MB...28.05 INCHES.

HAZARDS AFFECTING LAND

WIND...HURRICANE AND TROPICAL STORM CONDITIONS ARE OCCURRING OVER PORTIONS OF THE NORTHWESTERN BAHAMAS...BUT SHOULD BEGIN TO DIMINISH OVERNIGHT. TROPICAL STORM FORCE WINDS ARE EXPECTED WITHIN THE SOUTHERN PORTION OF THE WARNING AREA ALONG THE UNITED STATES EAST COAST BY LATE FRIDAY. HURRICANE FORCE WINDS ARE EXPECTED TO FIRST REACH THE HURRICANE WARNING AREA BY SATURDAY.

STORM SURGE...IN THE NORTHWESTERN BAHAMAS IN AREAS OF ONSHORE WINDS NEAR THE CENTER OF IRENE...AN EXTREMELY DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 7 TO 11 FEET ABOVE NORMAL TIDE LEVELS OVER THE NORTHWESTERN BAHAMAS. WATER LEVELS WILL GRADUALLY SUBSIDE OVER THE CENTRAL BAHAMAS TONIGHT. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

STORM SURGE...ALONG THE EASTERN COAST OF THE UNITED STATES...AN EXTREMELY DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 5 TO 10 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA INCLUDING THE ABLEMARLE AND PAMLICO SOUNDS. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE...DESTRUCTIVE... AND LIFE-THREATENING WAVES. IRENE ALSO HAS THE POTENTIAL TO PRODUCE SIGNIFICANT STORM SURGE FLOODING WITHIN THE HURRICANE WATCH AREA INCLUDING PORTIONS OF THE CHESAPEAKE BAY...TRIBUTARIES...AND THE EASTERN SHORE.

RAINFALL...IRENE IS EXPECTED TO PRODUCE RAINFALL ACCUMULATIONS OF 6 TO 12 INCHES OVER THE NORTHERN BAHAMAS. STORM TOTAL RAINFALL AMOUNTS OF 6 TO 10 INCHES WITH ISOLATED MAXIMUM AMOUNTS OF 15 INCHES IS EXPECTED OVER PORTIONS OF EASTERN NORTH CAROLINA AND IN THE MID-ATLANTIC STATES ALONG THE PATH OF IRENE.

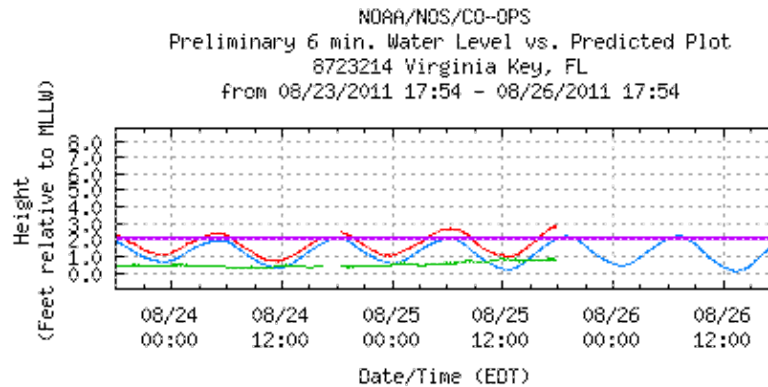
SURF...SWELLS GENERATED BY IRENE ARE AFFECTING PORTIONS OF THE COAST OF THE SOUTHEASTERN UNITED STATES. THESE SWELLS WILL CAUSE LIFE-THREATENING SURF AND RIP CURRENT CONDITIONS.

FORECASTER BROWN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Virginia Key - Water Level](#), [Virginia Key - Winds](#), [Virginia Key - Barometric](#), [Virginia Key - Air/Water Temp](#), [Lake Worth Pier - Water Level](#), [Lake Worth Pier - Winds](#), [Lake Worth Pier - Barometric](#), [Lake Worth Pier - Air/Water Temp](#), [Trident Pier - Water Level](#), [Trident Pier - Winds](#), [Trident Pier - Air/Water Temp](#), [Mayport \(Bar Pilots Dock\) - Water Level](#), [Mayport \(Bar Pilots Dock\) - Winds](#), [Mayport \(Bar Pilots Dock\) - Barometric](#), [Mayport \(Bar Pilots Dock\) - Air/Water Temp](#), [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Fort Pulaski - Barometric](#), [Fort Pulaski - Air/Water Temp](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Springmaid Pier - Barometric](#), [Springmaid Pier - Air/Water Temp](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wrightsville Beach - Air/Water Temp](#), [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [USCG Station Hatteras - Barometric](#), [USCG Station Hatteras - Air/Water Temp](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Chesapeake Bay Bridge Tunnel - Barometric](#), [Chesapeake Bay Bridge Tunnel - Air/Water Temp](#).

Virginia Key, FL - Return to List



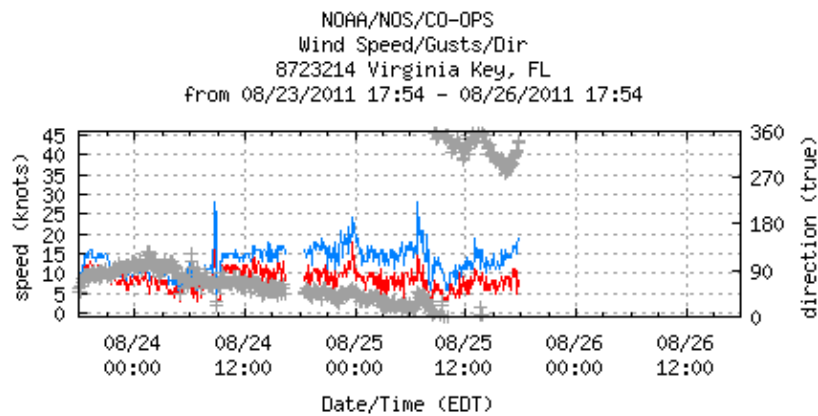
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: **Observed: 2.86 ft.** **Predicted: 2.05 ft.** **Residual: 0.81 ft.**

Historical Maximum Water Level: Oct 24 2005, 2.58 ft. above MHHW

Virginia Key, FL - Return to List

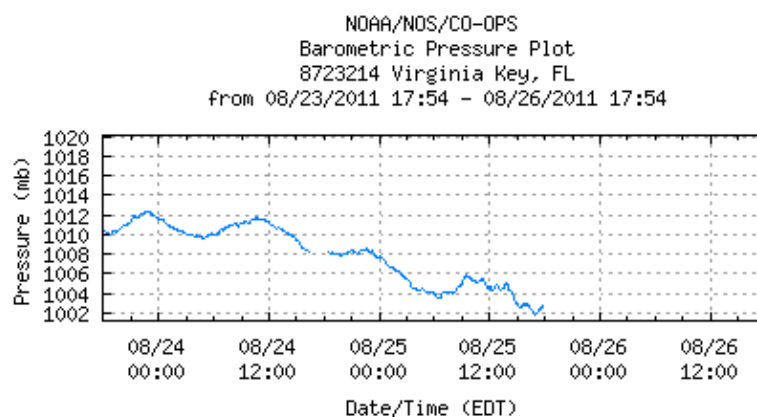


speed — gusts — direction +

Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 8 knots **Gusts: 19 knots** **Direction: 340° T**

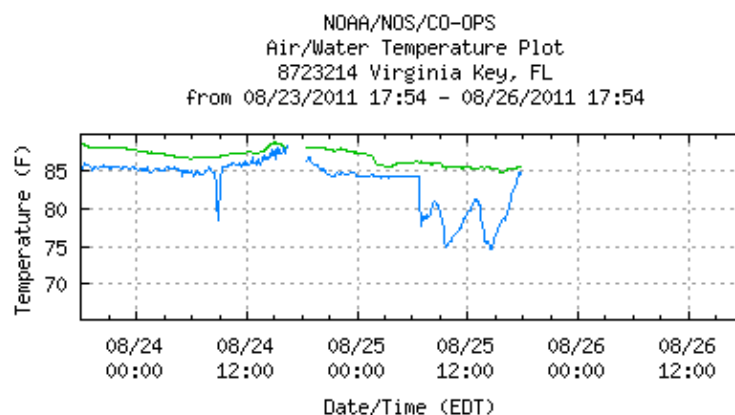
Virginia Key, FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1002.6 mb

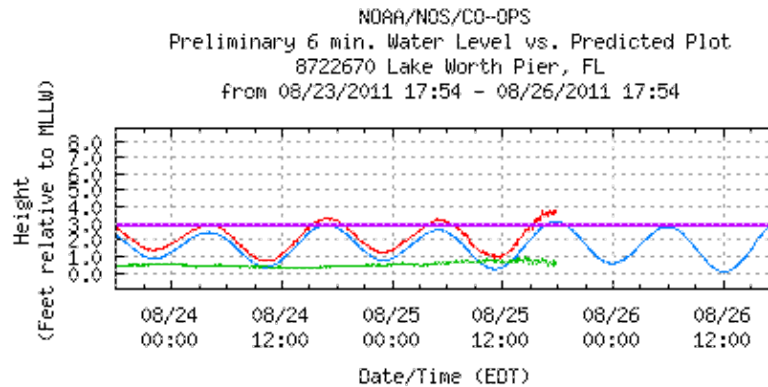
Virginia Key, FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 85.6° F Air Temperature: 84.6° F

[Lake Worth Pier, FL - Return to List](#)



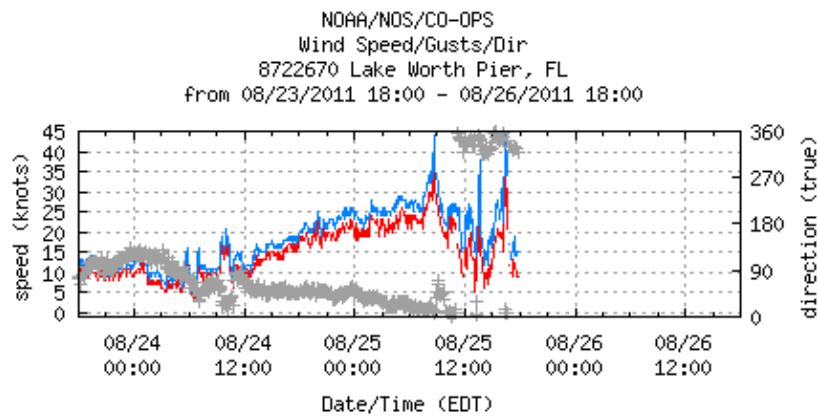
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: **Observed: 3.69 ft.** **Predicted: 3.10 ft.** **Residual: 0.59 ft.**

Historical Maximum Water Level: Nov 23 1984, 1.88 ft. above MHHW

[Lake Worth Pier, FL - Return to List](#)

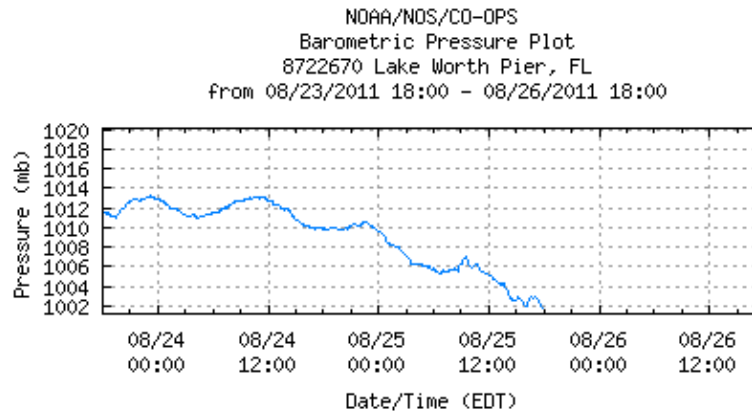


speed — gusts — direction +

Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 9 knots **Gusts: 15 knots** **Direction: 318° T**

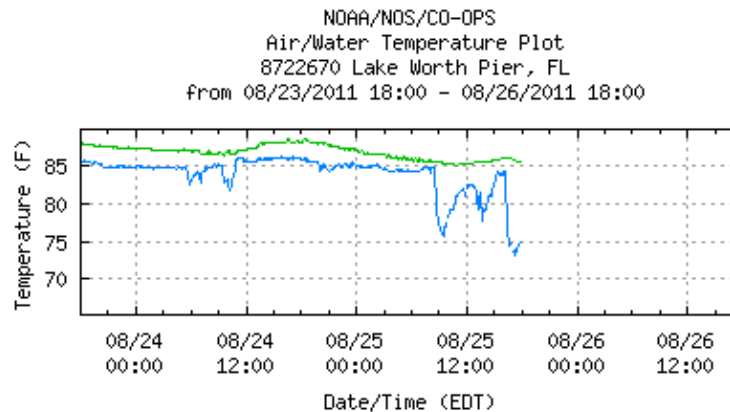
[Lake Worth Pier, FL - Return to List](#)



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1001.7 mb

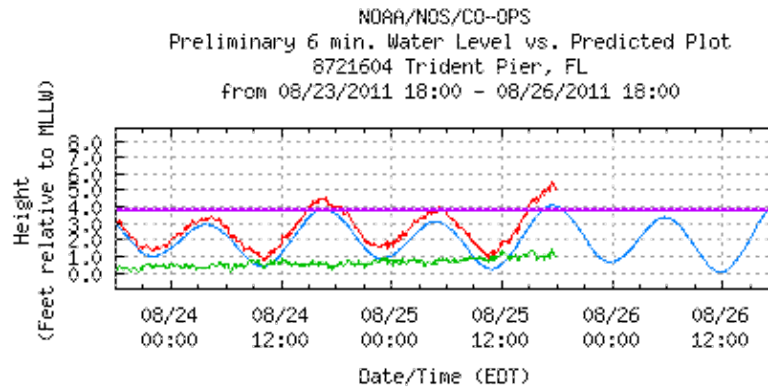
[Lake Worth Pier, FL - Return to List](#)



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 85.6° F Air Temperature: 75.0° F

[Trident Pier, FL - Return to List](#)



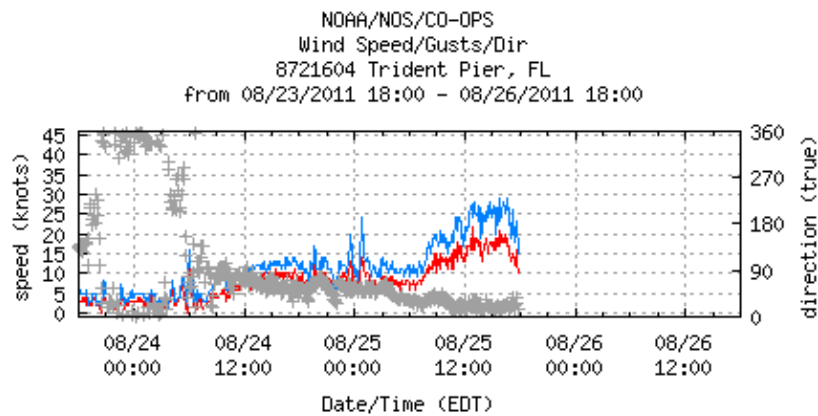
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: **Observed: 5.11 ft.** **Predicted: 4.07 ft.** **Residual: 1.04 ft.**

Historical Maximum Water Level: Sep 26 2004, 4.01 ft. above MHHW

[Trident Pier, FL - Return to List](#)

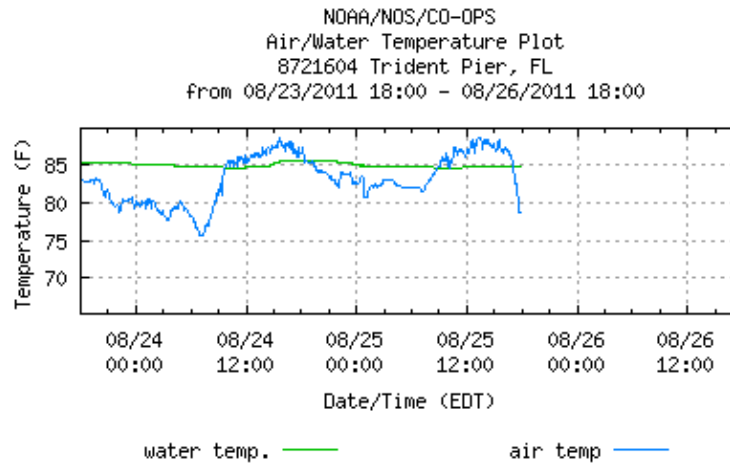


speed — gusts — direction +

Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 10 knots **Gusts: 15 knots** **Direction: 16° T**

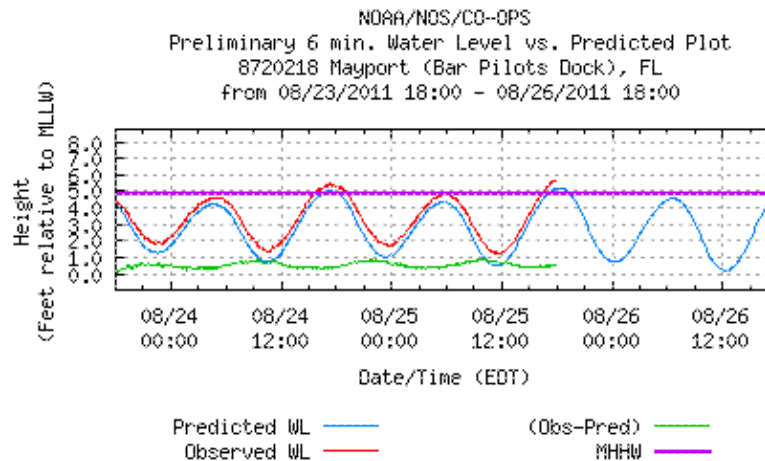
Trident Pier, FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 84.7° F Air Temperature: 78.6° F

Mayport (Bar Pilots Dock), FL - Return to List

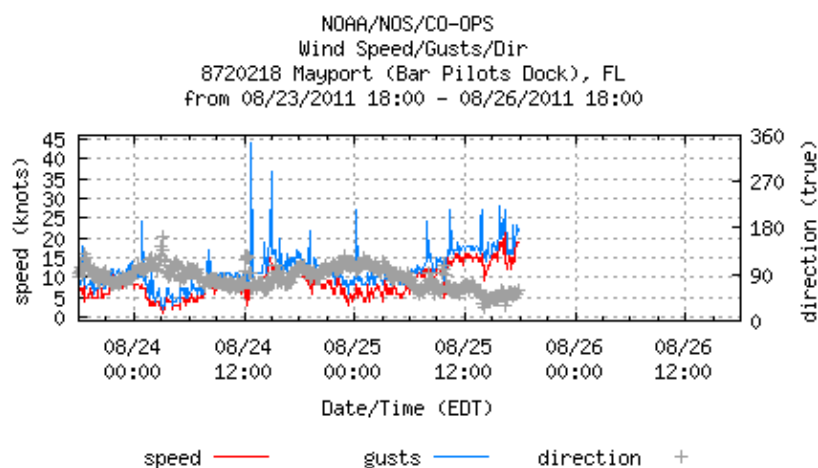


Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: Observed: 5.64 ft. Predicted: 5.14 ft. Residual: 0.50 ft.

Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW

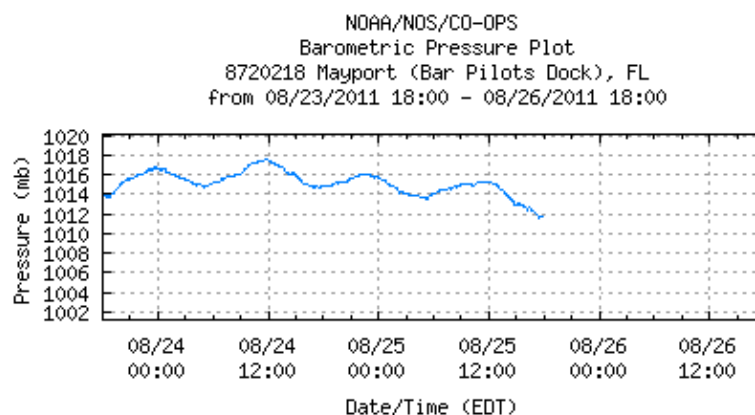
Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 19 knots Gusts: 22 knots Direction: 58° T

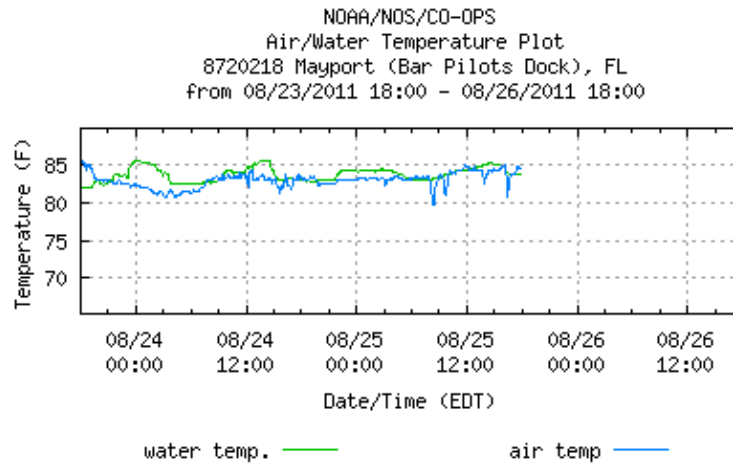
Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1011.7 mb

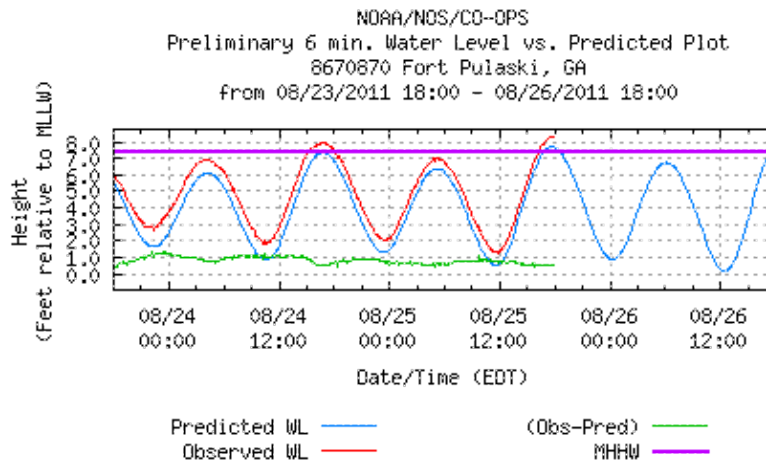
Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 83.8° F Air Temperature: 84.6° F

Fort Pulaski, GA - Return to List

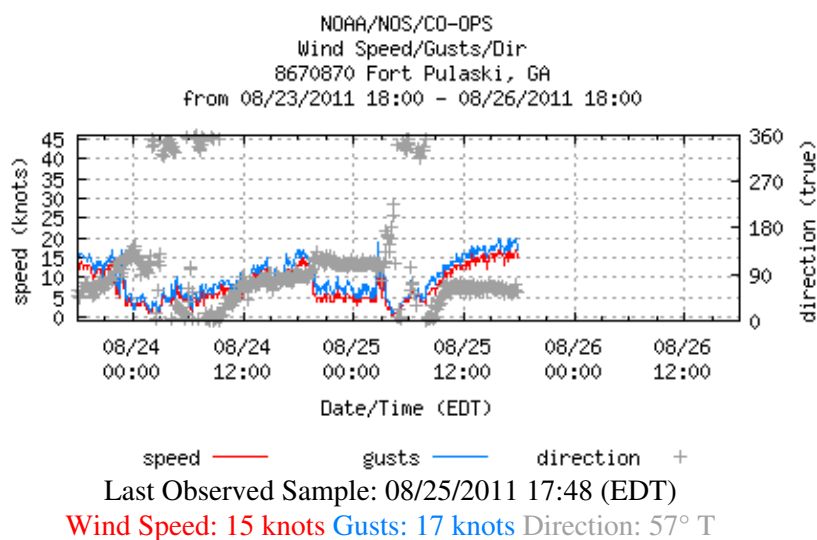


Last Observed Sample: 08/25/2011 17:48 (EDT)

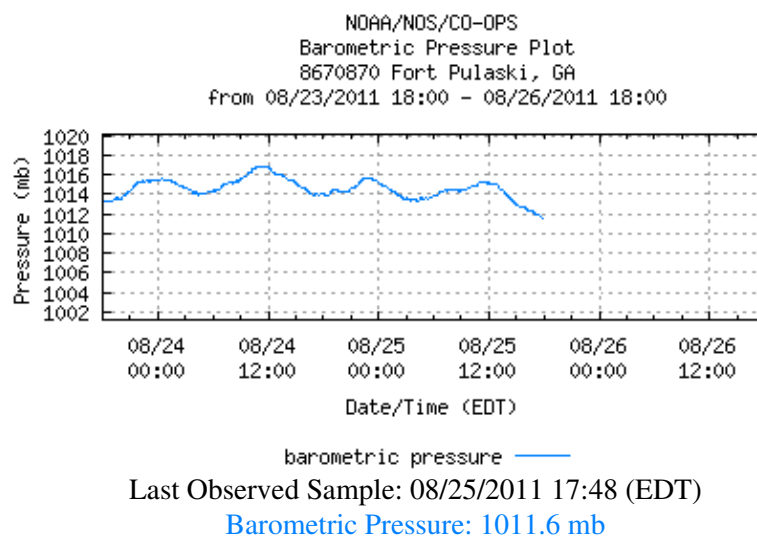
Relative to MLLW: Observed: 8.25 ft. Predicted: 7.68 ft. Residual: 0.57 ft.

Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above MHHW

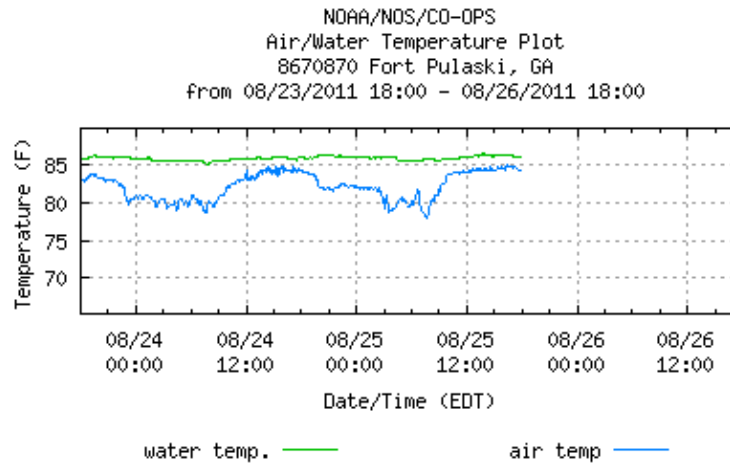
Fort Pulaski, GA - Return to List



Fort Pulaski, GA - Return to List



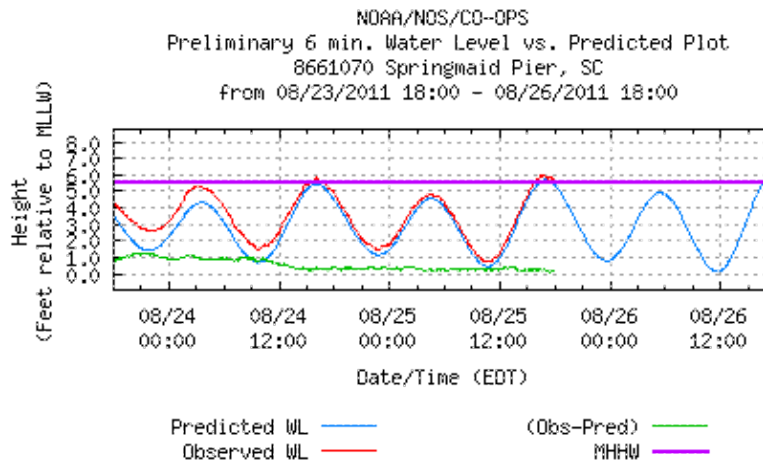
Fort Pulaski, GA - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 86.2° F Air Temperature: 84.4° F

Springmaid Pier, SC - Return to List

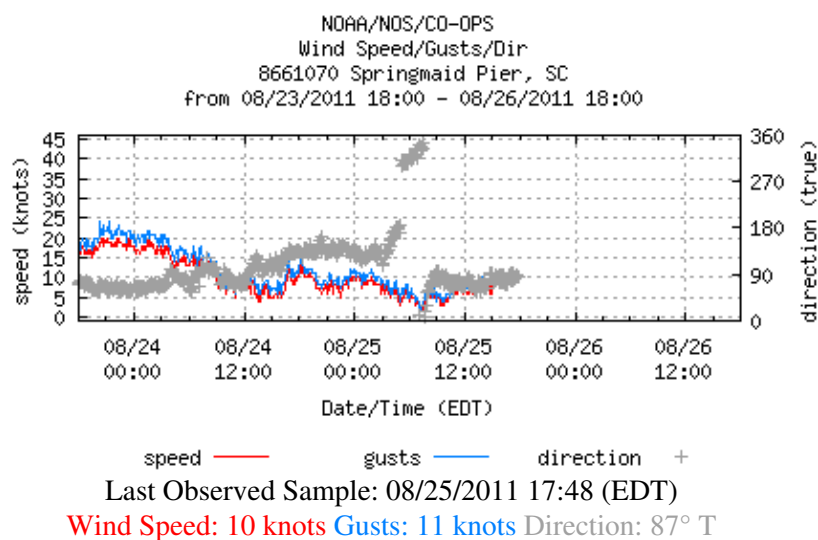


Last Observed Sample: 08/25/2011 17:48 (EDT)

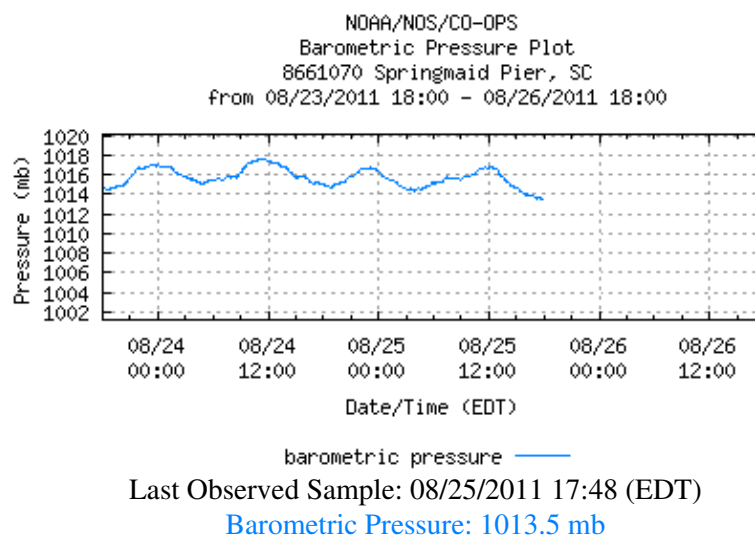
Relative to MLLW: Observed: 5.72 ft. Predicted: 5.48 ft. Residual: 0.24 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above MHHW

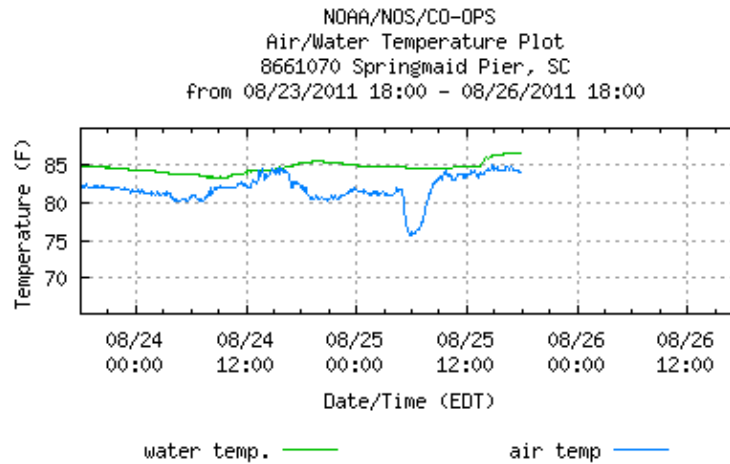
[Springmaid Pier, SC - Return to List](#)



[Springmaid Pier, SC - Return to List](#)



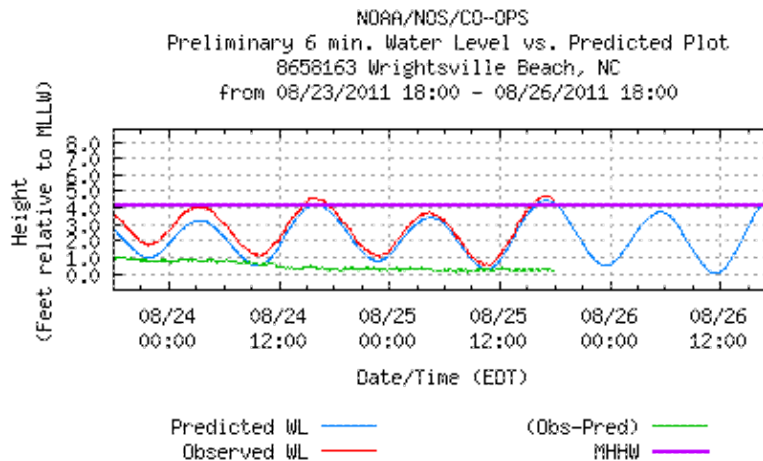
Springmaid Pier, SC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 86.5° F Air Temperature: 84.0° F

Wrightsville Beach, NC - Return to List

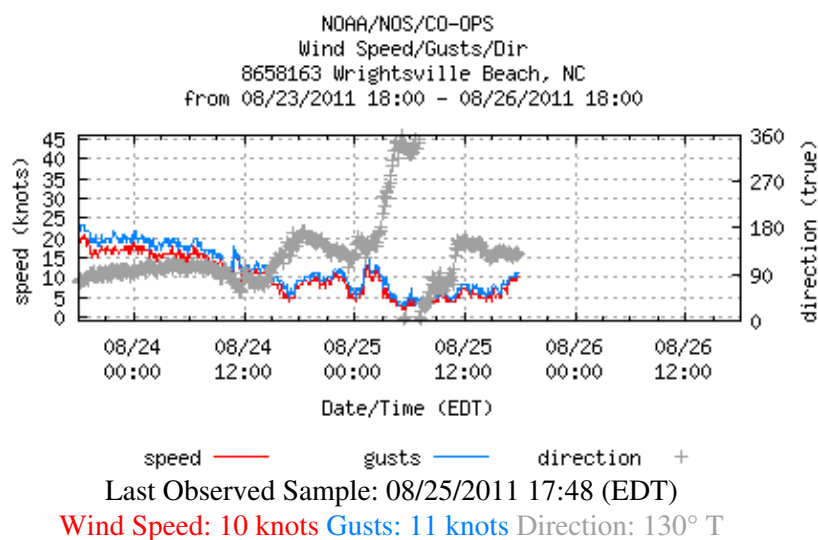


Last Observed Sample: 08/25/2011 17:48 (EDT)

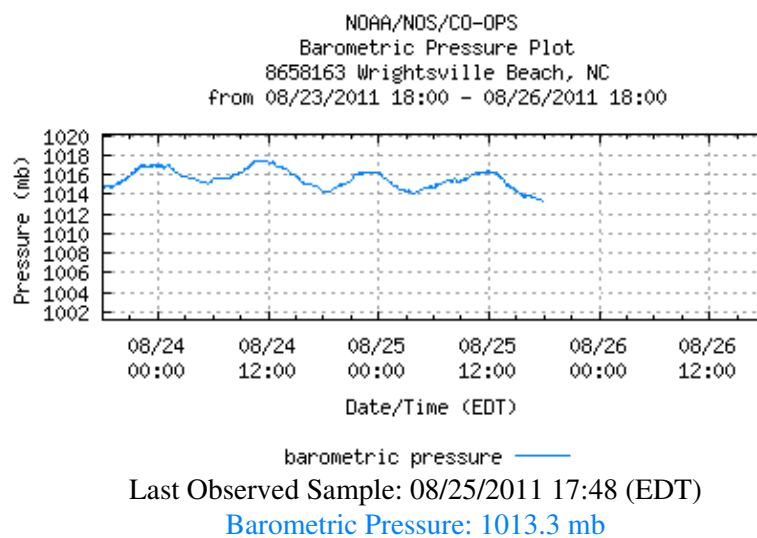
Relative to MLLW: Observed: 4.50 ft. Predicted: 4.33 ft. Residual: 0.17 ft.

Historical Maximum Water Level: Sep 25 2008, 2.81 ft. above MHHW

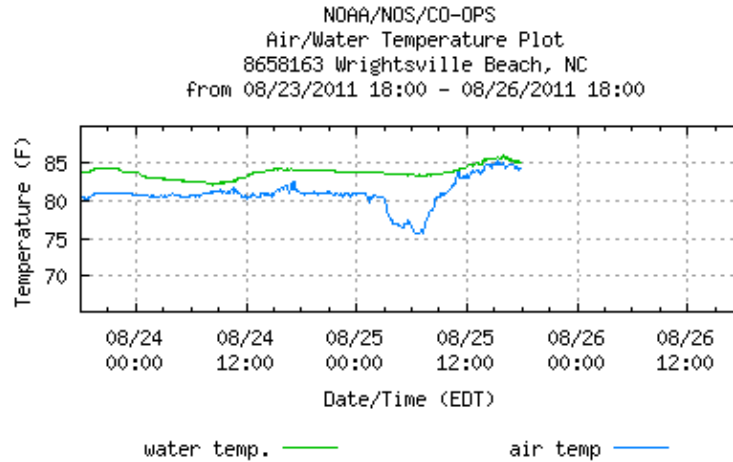
Wrightsville Beach, NC - Return to List



Wrightsville Beach, NC - Return to List



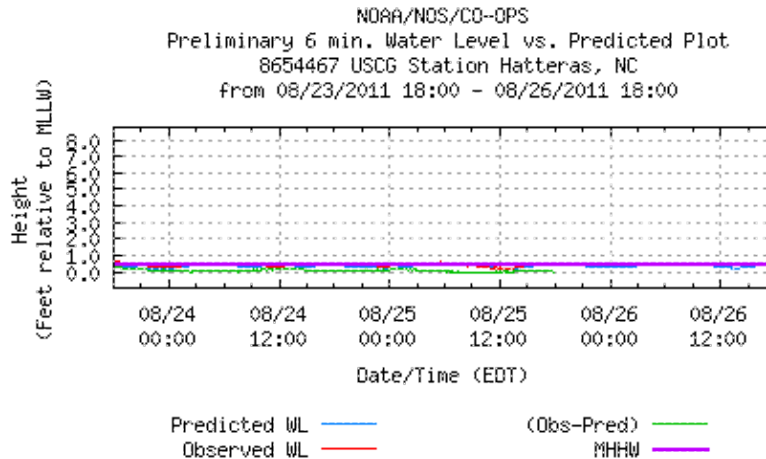
Wrightsville Beach, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 85.1° F Air Temperature: 84.2° F

USCG Station Hatteras, NC - Return to List

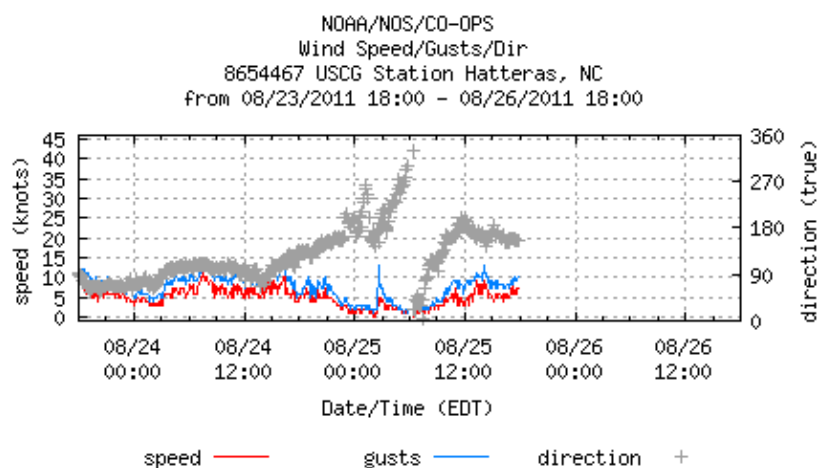


Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: Observed: 0.48 ft. Predicted: 0.46 ft. Residual: 0.02 ft.

Historical Maximum Water Level: , 0 ft. above MHHW

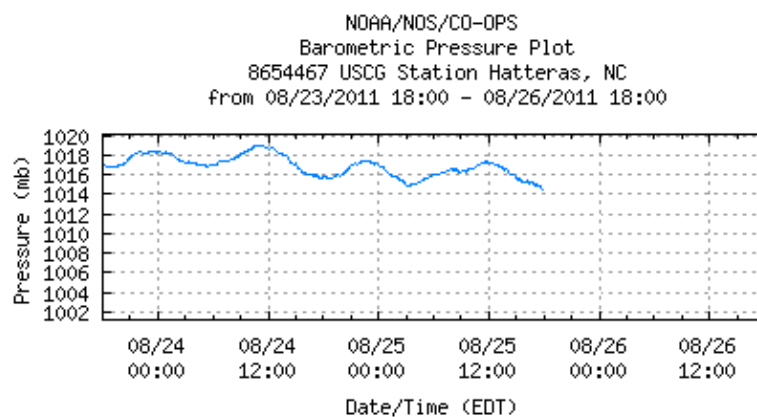
USCG Station Hatteras, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 7 knots Gusts: 10 knots Direction: 157° T

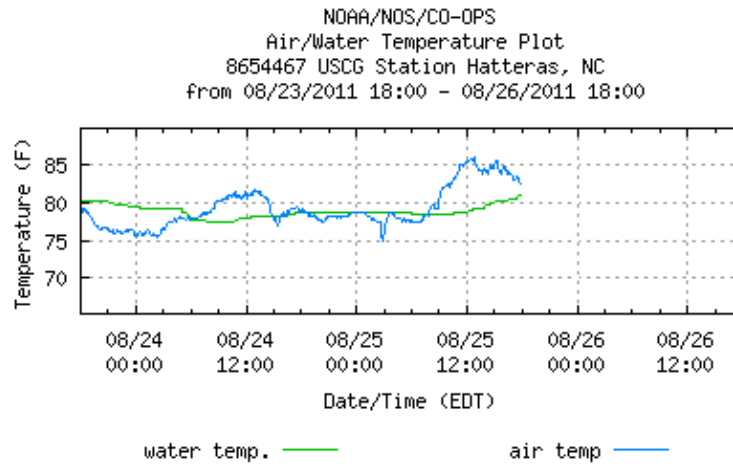
USCG Station Hatteras, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1014.5 mb

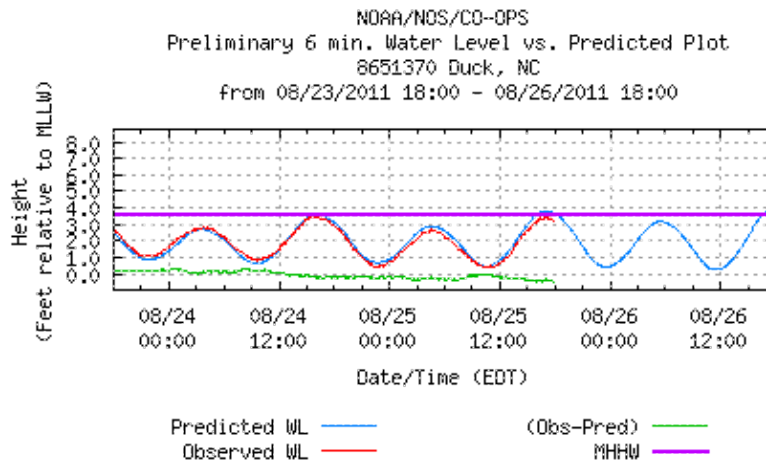
USCG Station Hatteras, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 81.0° F Air Temperature: 82.6° F

Duck, NC - Return to List

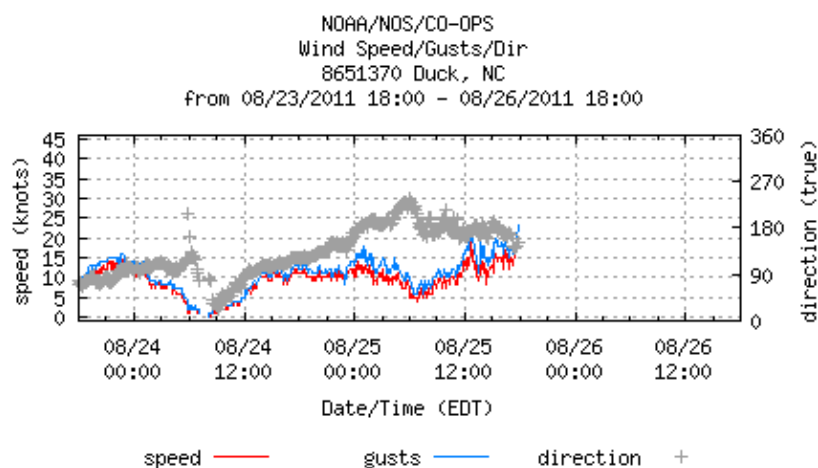


Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: Observed: 3.24 ft. Predicted: 3.69 ft. Residual: -0.45 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above MHHW

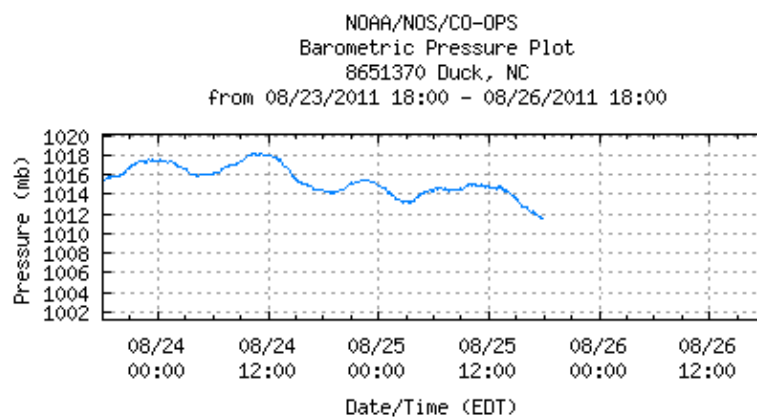
Duck, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 20 knots Gusts: 23 knots Direction: 151° T

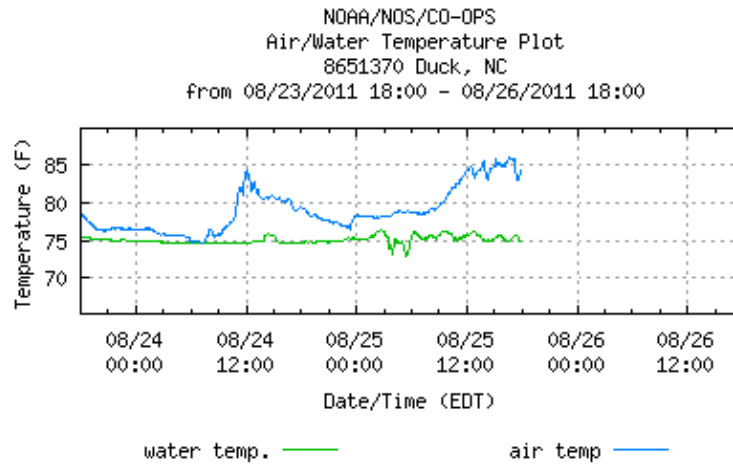
Duck, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1011.5 mb

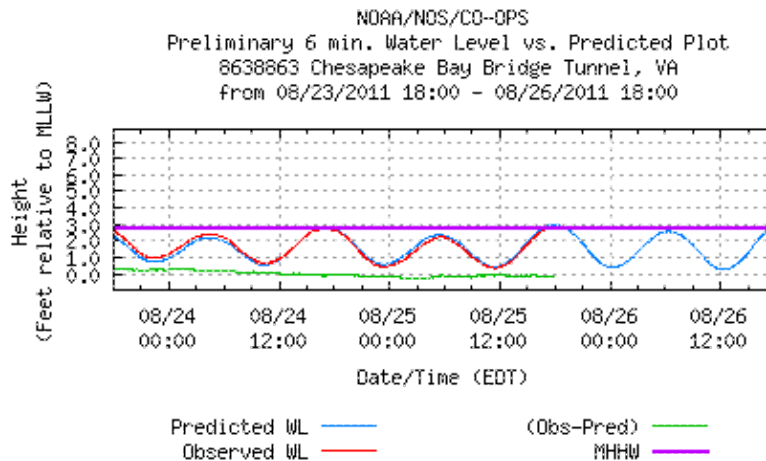
Duck, NC - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 75.0° F Air Temperature: 84.2° F

Chesapeake Bay Bridge Tunnel, VA - Return to List

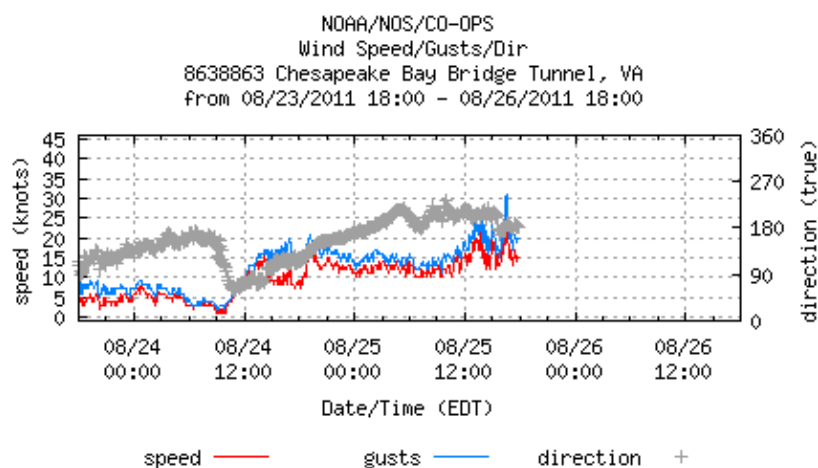


Last Observed Sample: 08/25/2011 17:48 (EDT)

Relative to MLLW: Observed: 2.81 ft. Predicted: 2.96 ft. Residual: -0.15 ft.

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above MHHW

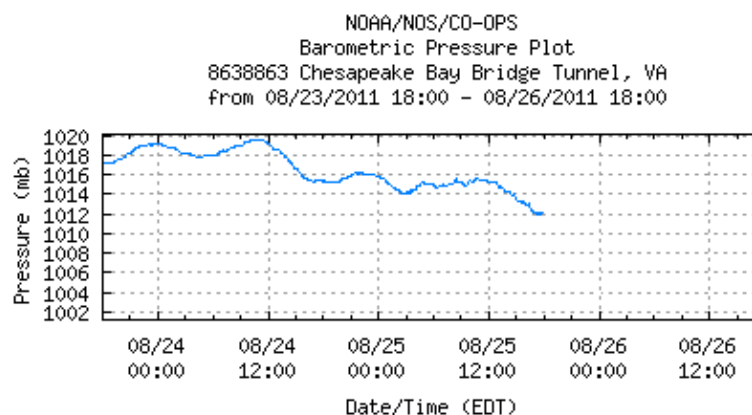
Chesapeake Bay Bridge Tunnel, VA - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Wind Speed: 15 knots Gusts: 20 knots Direction: 183° T

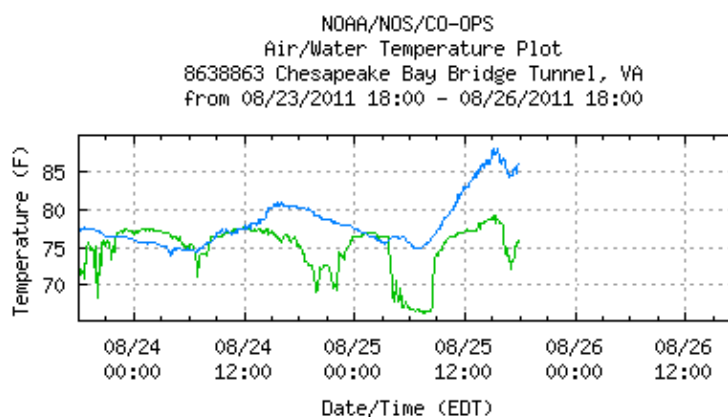
Chesapeake Bay Bridge Tunnel, VA - Return to List



Last Observed Sample: 08/25/2011 17:48 (EDT)

Barometric Pressure: 1012.1 mb

[Chesapeake Bay Bridge Tunnel, VA - Return to List](#)



water temp. — air temp —

Last Observed Sample: 08/25/2011 17:48 (EDT)

Water Temperature: 75.9° F Air Temperature: 86.0° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce